2	UNBUNDLED NETWORK ELEMENTS (Checklist Item (ii))	
General	Provisions for Unbundled Network Elements	
2.1	Provide to any requesting carrier nondiscriminatory access to network elements (Act, §§ 251(c)(3), 271(c)(2)(B)(ii): 47 CFR § 51.307(a))	Auinbauh Affidavit, ¶¶ 46 Deere Affidavit, ¶¶ 40-57 Loehman Affidavit, ¶ 9a
2.2	At any technically feasible point (Act, § 251(c)(3); 47 CFR § 51.307(a))	Deere Affidavit, ¶¶ 43-44
2.3	On rates, terms, and conditions that are just, reasonable, and nondiscriminatory (Act, § 251(c)(3); 47 CFR § 51.307(a))	Deere Affidavit, ¶¶ 42, 44 Loehman Affidavit, ¶¶ 9f, g
2.4	Provide network elements in a manner that allows requesting carrier to provide any telecommunications service that may be offered by means of that element (Act, § 251(c)(3); 47 CFR § 51.307(c))	Deere Affidavit, ¶¶ 42, 44
	Access to the facility or functionality of a network element provided separately from access to other elements, and for a separate charge (47 CFR § 51.307(d))	Deere Affidavit, ¶ 45
	Provide technical information regarding SWBT's facilities to enable requesting carrier to achieve access to elements (47 CFR § 51.307(e))	Deere Affidavit, ¶ 44, 59, 85; Schedule 1
	No limitations, restrictions, or requirements on requests that would impair a requesting carrier's ability to provide a telecommunications service in a manner it intends (47 CFR § 51.309(a))	Deere Affidavit, ¶¶ 42, 46
	Requesting carrier may purchase an unbundled network element to provide exchange access service to itself (47 CFR § 51.309(b))	Deere Affidavit, ¶ 47
;	Requesting carrier is entitled to exclusive use of an unbundled network facility for a period of time, and to use of an unbundled feature, function, or capability for a period of time (47 CFR § 51.309(c))	Deere Affidavit, ¶ 48
	SWBT retains duty to maintain, repair, or replace the element (47 CFR § 51.309(c))	Deere Affidavit, ¶ 48 Kramer Affidavit, ¶¶ 23, 28

		Deers Affidavit ## 42 49
2.11	Where technically feasible, quality of the element and access to the element must be at least equal to what SWBT provides itself or any subsidiary, affiliate, or other party (47 CFR §§ 51.311(a), (b))	Deere Affidavit, ¶¶ 42, 48
2.12	Terms and conditions of access to	Auinbauh Affidavit, ¶ 46
	elements offered equally to all requesting carriers (47 CFR § 51.313(a))	Deere Affidavit, ¶ 49
		Loehman Affidavit, ¶ 33; Schedule H
2.13	Terms and conditions of access to	Deere Affidavit, ¶ 48
	elements shall be no less favorable than terms and conditions under which SWBT provides such elements to itself (47 CFR § 51.313(b))	Loehman Affidavit, ¶ 33; Schedule H
2.14	Pricing is just, reasonable, and nondiscriminatory, is based on cost, and includes a reasonable profit (Act, § 252(d)(1))	Loehman Affidavit, ¶¶ 9a, c, f, g, 16-32; Schedule G
Combinations of Unbundled Elements (47 CFR § 51.315)		
2.15	Unbundled elements provided in a	Deere Affidavit, ¶¶ 46, 50, 84-113
	manner that allows requesting carriers to combine them to provide a telecommunications service (47 CFR § 51.315(a))	Loehman Affidavit, ¶ 33; Schedule H
Networ	k Interface Device (47 CFR § 51.319(b))	
2.16	Requesting carrier can connect its local loops to customer's inside wiring through SWBT's NID and an adjoining NID deployed by requesting carrier (47 CFR § 51.319(b)(2))	Deere Affidavit, ¶ 51, 53-56
Operati	ons Support Systems	
2.17	All required OSS functions made available to purchasers of unbundled elements (47 CFR § 51.313(c))	Deere Affidavit, ¶ 51
		Ham Affidavit, ¶ 6
	3 - 1 - 1 - 1 - 1	Kramer Affidavit, ¶¶ 23-25
2.18	Pre-ordering and provisioning (47 CFR § 51.319(f)(1))	Auinbauh Affidavit, Schedule 4
		Dysart Affidavit, Pre-Ordering ¶¶ 16-25
		Dysart Affidavit, Provisioning ¶¶ 40-66
		Ham Affidavit, ¶¶ 25-41
		Kramer Affidavit, ¶¶ 13-14
		Lowrance Affidavit, ¶ 16
		Thorsen Affidavit, pp. 3, 5-8, 14-15
		See also § 2.22 below

2.19	Ordering (47 CFR § 51.319(f)(1))	Auinbauh Affidavit, Schedule 4
		Dysart Affidavit, ¶¶ 26-39
		Ham Affidavit, ¶¶ 42-90; Attachment G
		Lowrance Affidavit, ¶¶ 14-27, 33-35
		Thorsen Affidavit, pp. 7-8, 14-15
2.20	Maintenance and repair (47 CFR	Dysart Affidavit, ¶¶ 67-90
	§ 51.319(f)(1))	Ham Affidavit, ¶¶ 91-106
		Kramer Affidavit, ¶¶ 23-31
2.21	Billing (47 CFR § 51.319(f)(1))	Dysart Affidavit, ¶¶ 91-125
		Ham Affidavit, ¶¶ 107-118
		Lowrance Affidavit, ¶¶ 28-29
Opera	tor Services and Directory Assistance	
2.22	Operator services facilities (47 CFR	Auinbauh Affidavit, Schedule 4
`	§ 51.319(g))	Deere Affidavit, ¶ 51
		Dysart Affidavit, ¶¶ 126-134
		Keener Affidavit, ¶ 13
2.23	Directory Assistance facilities (47 CFR	Dysart Affidavit, ¶¶ 126-134
	§ 51.319(g))	Keener Affidavit, ¶¶ 7-12
2.24	Access provided where technically feasible (47 CFR § 51.319(g))	Deere Affidavit, ¶¶ 51, 58-59, 77, 79
Furthe	er Unbundling	
2.25	Unbundling of additional elements where technically feasible in accordance with 47 CFR § 51.317	Deere Affidavit, ¶ 58
3	POLES, DUCTS, CONDUITS, AND RIGHTS OF WAY (Checklist Item (iii))	
3.1	Provide nondiscriminatory access on	Auinbauh Affidavit, Schedule 4
	same basis as provided to SWBT, its affiliates, or any other person at just and reasonable rates in accordance with the requirements of Section 224 of the Act (Act, §§ 224, 251(b)(4), 271(c)(2)(B)(iii); 47 CFR § 1.1403(a))	Hearst Affidavit, ¶¶ 36-40
3.2	Costs of modifications allocated in accordance with 47 CFR § 1.1416	Hearst Affidavit, ¶ 32

4	UNBUNDLED LOOPS (Checklist Item (iv))	
4.1	Transmission facility between an MDF or equivalent facility in SWBT's central office and end-user premises (47 CFR § 51.319(a))	Auinbauh Affidavit, Schedule 14 Deere Affidavit, ¶¶ 51, 62, 202-204
4.2	Pricing is just, reasonable, and nondiscriminatory, is based on cost, and includes a reasonable profit (Act, § 252(d)(1))	Loehman Affidavit, ¶¶ 9a. c, f. g. 16-32: Schedule G
5	UNBUNDLED TRANSPORT (Checklist Item (v))	
.5.1	Dedicated transport or entrance facilities or shared transport facilities providing telecommunications service between wire centers or switches owned by SWBT or requesting carrier; from trunk side of switch unbundled from switching or other services (47 CFR § 51.319(d)(1))	Deere Affidavit, ¶¶ 66-73
5.2	Exclusive use of interoffice transmission facilities dedicated to a particular customer or carrier (47 CFR § 51.319(d)(1))	Deere Affidavit, ¶¶ 66-73
5.3	Provide all technically feasible transmission facilities, features, functions, and capabilities that requesting carrier could use to provide telecommunications services (47 CFR § 51.319(d)(2)(ii))	Deere Affidavit, ¶¶ 66-73, 107-113
5.4	Permit, as technically feasible, requesting carrier to connect interoffice facilities to equipment it designates, including its collocated facilities (47 CFR § 51.319(d)(2)(iii))	Deere Affidavit, ¶¶ 66-68, 74
5.5	Permit requesting carrier to obtain functionality of SWBT's DCS systems in same manner as interexchange carriers (47 CFR § 51.319(d)(2)(iv))	Deere Affidavit, ¶ 71
5.6	Pricing is just, reasonable, and nondiscriminatory, is based on cost, and includes a reasonable profit (Act, § 252(d)(1))	Loehman Affidavit, ¶¶ 9a, c, f, g, 16-32; Schedule G
6	LOCAL AND TANDEM SWITCHING (Checklist Item (vi))	
6.1	Local switching capability (Act, § 271(c)(2) (B)(vi); 47 CFR § 51.319(c)(1))	Auinbauh Affidavit, Schedule 4 Deere Affidavit, ¶ 74

·		
6.1.1	Line-side facilities (47 CFR § 51.319(c)(1)(i)(A))	Deere Affidavit, ¶¶ 74-83
6.1.2	Trunk-side facilities (47 CFR § 51.319(c) (1)(i)(B))	Deere Affidavit, ¶¶ 74-83
6.1.3	All features, functions, and capabilities of the switch (47 CFR § 51.319(c)(1)(i)(C)) including:	Deere Affidavit, ¶ 77
6.1.3.1	Basic switching function and capabilities (47 CFR § 51.319(c)(1)(i)(C)(1))	Deere Affidavit, ¶ 77
6.1.3.2	All other features switch is capable of providing, including custom calling, CLASS, Centrex, and any technically feasible customized routing functions (47 CFR § 51.319(c)(1) (i)(C)(2))	Deere Affidavit, ¶¶ 77, 83
6.1.4	SWBT will transfer customer's local service in same interval it transfers customers between IXCs, if transfer requires only a software change (47 CFR § 51.319(c)(ii))	Deere Affidavit, ¶ 180
6.2	Tandem switching capability (47 CFR § 51.319(c)(2))	Deere Affidavit, ¶¶ 74-76, 79, 82, 85, 87
6.2.1	Trunk-connect facilities (47 CFR § 51.319(c)(2)(i))	Deere Affidavit, ¶ 82
6.2.2	Trunk-to-trunk switching function (47 CFR § 51.319(c)(2) (ii))	Deere Affidavit, ¶¶ 74, 82
6.2.3	Functions centralized in tandem switches, including call recording, routing to operator services, and signaling conversion features (47 CFR § 51.319(c)(2)(iii))	Deere Affidavit, ¶¶ 77, 82
6.3	Pricing is just, reasonable, and nondiscriminatory, is based on cost, and includes a reasonable profit (Act, § 252(d)(1))	Loehman Affidavit, ¶¶ 9a, c, f, g, 16-32; Schedule G
7	ACCESS TO 911 AND E911 SERVICES, OPERATOR CALL COMPLETION SERVICE, AND DIRECTORY ASSISTANCE (Checklist Item (vii))	
7.1	911 and E911 services (Act, § 271 (c)(2)(B)(vii)(I))	Auinbauh Affidavit, Schedule 4
		Deere Affidavit, ¶¶ 77, 114-131 Dysart Affidavit, ¶¶ 155-160
7.2	Operator call completion services (Act, § 271(c)(2)(B)(vii)(III))	Keener Affidavit, ¶¶ 4, 13-16

7.2.1	Nondiscriminatory rates, terms, and conditions for all carriers (47 CFR § 51.217(a)(2)(i))	Keener Affidavit, ¶¶ 4, 9-10, 15
7.2.2	With quality that is at least equal to that of SWBT (47 CFR § 51.217(a)(2)(ii))	Deere Affidavit, ¶¶ 114-116
		Keener Affidavit, ¶ 15
7.2.3	With no unreasonable dialing delays (47 CFR § 51.217(b))	Keener Affidavit, ¶ 16
7.2.4	Accessible by dialing 0 or 0+, regardless	Deere Affidavit, ¶¶ 174-177
	of local service provider (47 CFR § 51.217(c)(2))	Keener Affidavit, ¶¶ 13-14
7.2.5	Make available in their entirety and provide access to all adjunct services (47 CFR § 51.217(c)(3)(iv))	Keener Affidavit, ¶¶ 13-16
7.2.6	Provide branding, or provide service without SWBT branding, upon request (47 CFR § 51.217(d))	Keener Affidavit, ¶¶ 9, 17-21
7.3	Directory assistance services (Act, § 271(c)(2)(B)(vii)(II))	Keener Affidavit, ¶¶ 7-12
7.3.1	Nondiscriminatory rates, terms, and conditions for all carriers (47 CFR § 51.217(a)(2)(i))	Keener Affidavit, ¶ 9
7.3.2	With quality that is at least equal to that of SWBT (47 CFR § 51.217(a)(2)(ii))	Keener Affidavit, ¶ 9
7.3.3	With no unreasonable dialing delays (47 CFR § 51.217(b))	Keener Affidavit, ¶ 10
7.3.4	Any customer of a competing provider can obtain directory listings, except unlisted numbers, for customers of any carrier on a nondiscriminatory basis (47 CFR §§ 51.217(c)(3)(i); 51.217(c)(3)(iii))	Keener Affidavit, ¶¶ 11-12
7.3.5	Directory listings provided to competing provider in readily accessible magnetic tape or electronic formats in a timely fashion (47 CFR § 51.217(c)(3)(ii))	Keener Affidavit, ¶¶ 11-12
7.3.6	Competing providers have access to and	Deere Affidavit, ¶¶ 119, 131
	may read information in SWBT's directory assistance databases (47 CFR § 51.217(c)(3)(ii))	Keener Affidavit, ¶¶ 11-12
7.3.7	Make available in their entirety and provide access to all adjunct services (47 CFR § 51.217(c)(3) (iv))	Keener Affidavit, ¶ 9
7.3.8	Provide branding, or provide service without SWBT branding, upon request (47 CFR § 51.217(d))	Keener Affidavit, ¶¶ 9, 17-21

8	WHITE PAGES (Checklist Item (viii))	Lagrangia (Control of the Control of
8.1	White pages directory listing for customers of other carrier's local exchange service (Act, § 271(c)(2)(B)(viii); 47 CFR § 51.319(c)(1)(i)(C)(1))	Auinbauh Affidavit, ¶¶ 49-58; Schedule 4
9	ACCESS TO TELEPHONE NUMBERS (Checklist Item (ix))	
9.1	Nondiscriminatory access until the date numbering administration guidelines, plan, or rules are established (Act, § 271(c)(2) (B)(ix)); 47 CFR §§ 51.217(a)(2), 51.319(c)(1)(i)(C)(1))	Adair Affidavit, generally Auinbauh Affidavit, Schedule 4
9.2	After that date, compliance with such guidelines, plan, or rules (Act, § 271(c)(2)(B)(ix))	Adair Affidavit, ¶ 22
9.3	Access at least equal to what SWBT provides itself (47 CFR § 51.217(c)(1))	Adair Affidavit, ¶ 10-18
10	ACCESS TO SIGNALING AND CALL-RELATED DATABASES (Checklist Item (x))	
10.1	Signaling Networks (47 CFR § 51.319(e)(1))	Deere Affidavit, ¶¶ 132, 134
10.1.1	Signaling links (47 CFR § 51.319(e)(1)(i))	Deere Affidavit, ¶ 133
10.1.2	Signaling transfer points (47 CFR § 51.319(e)(1)(i))	Deere Affidavit, ¶¶ 133, 135
10.1.3	For carriers purchasing unbundling switching capability, access to SWBT's signaling network in same manner as SWBT (47 CFR § 51.319(e)(1)(ii))	Deere Affidavit, ¶¶ 132-134, 136, 154-155
10.1.4	For requesting carriers with their own switching facilities, access to SWBT's signaling for each of carrier's switches in same manner as SWBT connects its switches to an STP (47 CFR § 51.319(e)(1)(iii))	Deere Affidavit, ¶¶ 134, 142, 149
10.2	Call-related databases (47 CFR § 51.319(e)(2))	Deere Affidavit, ¶¶ 132, 136, 154-155
10.2.1	Line information database (47 CFR § 51.319(e)(2)(ii))	Deere Affidavit, ¶¶ 137-143
10.2.2	Toll-free calling database (47 CFR § 51.319(e)(2)(ii))	Deere Affidavit, ¶¶ 145-152
10.2.3	Downstream number portability database (47 CFR § 51.319(e)(2)(ii))	Deere Affidavit, ¶¶ 170, 172-173
		Fleming Affidavit, ¶¶ 10-11, 16, 22

10.2.4	AIN databases (47 CFR § 51.319(e)(2)(ii))	Deere Affidavit, ¶¶ 132, 136, 151-152
10.2.5	Physical access at the STP linked to the unbundled database (47 CFR § 51.319(e)(2)(ii))	Deere Affidavit, ¶¶ 133, 135, 142
10.2.6	Carriers purchasing local switching capability may access SWBT's service control point in same manner as SWBT (47 CFR § 51.319(e)(2)(iii))	Deere Affidavit, ¶ 134, 141-142, 151
10.2.7	Carrier deploying own switch given access to SWBT's service control point in manner allowing carrier to provide any call-related, database-supported services (47 CFR § 51.319(e)(2)(iv))	Deere Affidavit, ¶¶ 138, 141-142
10.2.8	Access to call-related databases complies with privacy provisions of § 222 of the Act (47 CFR § 51.319(e)(2)(vi))	Deere Affidavit, ¶¶ 140, 153
10.3	Service Management Systems (47 CFR § 51.319(e)(3))	Deere Affidavit, ¶ 152
10.3.1	Interconnects to the service control point and sends information and call processing instructions to service control point and provides requesting carriers with call-processing capabilities (47 CFR § 51.319(e)(3) (I)(A),(B))	Deere Affidavit, ¶¶ 132, 141-142, 151
10.3.2	Requesting carrier given information necessary to enter correctly, or format for entry, information for input into SMS (47 CFR § 51.319(e)(3)(ii))	Deere Affidavit, ¶ 152
10.3.3	Requesting carrier allowed same access as SWBT to develop AIN-based services via SMS (47 CFR § 51.319(e) (3)(iii))	Deere Affidavit, ¶¶ 151-152
10.3.4	Access to SMS complies with privacy provisions of § 222 of the Act (47 CFR § 51.319(e)(3)(v))	Deere Affidavit, ¶ 153
11	NUMBER PORTABILITY ((Checklist Item (xi))	
11.1	Provide interim number portability through RCF, DID or other comparable arrangements (Act, § 271(c)(2)(B)(xi); 47 CFR §§ 51.203, 52.27)	Auinbauh Affidavit, ¶¶ 59-74; Schedule 4
		Deere Affidavit, ¶¶ 156, 158, 170-171
		Kramer Affidavit, ¶¶ 16-22
		Loehman Affidavit, ¶ 9d
		Lowrance Affidavit, ¶¶ 39-45
11.2	Any other comparable and technically feasible method upon request, as soon as reasonably possible (Act, § 271(c)(2)(B)(xi))	Deere Affidavit, ¶¶ 170-171

11.3	Competitively neutral cost recovery mechanism (47 CFR §§ 52.29, 52.29(a))	Deere Affidavit, ¶ 172
11.4	After regulations are issued, full compliance with performance criteria and schedules for implementation of long-term database method (Act, § 271(c)(2)(B)(xi): 47 CFR § 52.23)	Auinbauh Affidavit, ¶¶ 59-61 Fleming Affidavit, ¶¶ 8-16, 18-22; Appendices A, C
12	LOCAL DIALING PARITY (Checklist Item (xii))	
12.1	Provide requesting carriers with services and information necessary to implement local dialing parity in accordance with Act, § 251(b)(3)	Deere Affidavit, ¶¶ 174-177
12.2	Nondiscriminatory access to telephone numbers, operator services, directory assistance, and directory listings with no unreasonable dialing delays (Act, § 251 (b)(3))	Deere Affidavit, ¶¶ 174-177
12.3	Ensure the same number of digits to dial a call regardless of the originating or terminating carrier (47 CFR §§ 51.205, 51.207)	Deere Affidavit, ¶¶ 174-177
13	RECIPROCAL COMPENSATION (Checklist Item (xiii))	
13.1	Establish reciprocal compensation arrangements for transport and termination of local telecommunications traffic with requesting carrier (Act §§ 251(b)(5), 252(d)(2), 271(c)(2)(b))	Auinbauh Affidavit, ¶¶ 75-84
13.2	Either provide for the mutual and reciprocal recovery by each carrier of costs associated with transport and termination of calls that originate on the network facilities of the other carrier (Act § 252(d)(2)(A)(i))	Auinbauh Affidavit, ¶¶ 75-84
13.2.1	Charges based on reasonable approximation of the additional cost of terminating such calls (Act § 252(d)(2)(A)(ii))	Auinbauh Affidavit, ¶¶ 75-84 Loehman Affidavit, ¶¶ 9f, g, 26-32
13.3	Or no charge for local traffic by party on whose network call originates (Act § 252(d)(2)(B)(I))	See § 13.2 above
14	RESALE (Checklist Item (xiv))	
14.1	Provide at wholesale rates any telecommunications service provided at retail to subscribers who are not telecommunications carriers (Act, § 251(c)(4)(A))	Loehman Affidavit, ¶ 36

14.1.1	With no unreasonable or discriminatory conditions or limitations (Act, § 251(c)(4)(B))	Loehman Affidavit, ¶¶ 36-38
14.1.1.	Restrictions on resale may include restrictions on cross-class selling, short-term promotions, or any other restrictions the state commission considers reasonable and nondiscriminatory (47 CFR § 51.613)	Loehman Affidavit, ¶ 37
14.2	Wholesale rates based on retail rates, excluding the portion of retail rates attributable to marketing, billing, collection, and other costs that will be avoided in wholesale resale (Act, § 252(d)(3))	Loehman Affidavit, ¶¶ 39-41
14.3	Provide branding, or provide service without SWBT branding, upon request, for resold operator, call completion, or directory assistance service, unless SWBT proves to the state commission that restricting rebranding or unbranding is reasonable and nondiscriminatory (47 CFR §§ 51.613(c), (c)(1), (c)(2))	Keener Affidavit, ¶¶ 9, 17- 21
14.4	For retail services SWBT has already offered to a limited group of customers, allow a requesting carrier to resell at wholesale rates those services to the same limited group of customers (47 CFR § 51.615)	Loehman Affidavit, ¶ 38
14.5	Assess end user common line charge on resellers in accord with 47 CFR § 51.617	L oe hman Affidavit, ¶ 41



Antitrust Division

City Center Building 1401 H Street, NW Washington, DC 20530

March 6, 1998

Liam S. Coonan, Esq. Senior Vice President and Assistant General Counsel SBC Communications, Inc. 175 E. Houston Street San Antonio, Texas 78205

Re: SBC Performance Measures

Dear Mr. Coonan:

As part of the Department's commitment to work with all Bell companies on relevant issues in advance of their section 271 applications, the Department of Justice and SBC Communications, Inc. ("SBC") have, as you know, been spending considerable time discussing issues relating to wholesale support processes and performance measures. In that regard, you have provided us with a draft list of proposed performance measures, a list that you have supplemented as our discussions have progressed.

Attachment A is a comprehensive list of performance measures. With the qualifications set forth below, we are satisfied that the performance measures listed in Attachment A, to which SBC has agreed, would be sufficient, if properly implemented, to satisfy the Department's need for performance measures for evaluating a Section 271 application filed in the not-too-distant future.

We appreciate SBC's engagement with the Department on satisfying our competitive assessment in advance of a filing and look forward to working with you on additional related issues. One such issue is whether the performance measures in Attachment A have been "properly implemented," since the majority of our discussions have dealt with the performance measures themselves and since it is upon the actual measures that this letter focuses. As you can appreciate, there are important repercussions that may arise from how the measures are implemented. For example, definitional issues and other details connected with the measures themselves (such as

As we have discussed with you, the Department has agreed to narrow variances from Attachment A in light of certain SBC processes and procedures. Specifically, we have agreed that SBC need not provide separate operator services and directory assistance speed-of-answer measurements for branded and unbranded calls and that SBC can limit its 911 measurements to an error-clearing interval measure that is presently under development.

the basis upon which due dates and start and stop times are set in particular measures) could significantly affect the meaning of the data. Thus, because we have not yet reached agreement on issues such as data retention, presentation, and reporting (e.g., disaggregation, reporting intervals and formats), and analysis, we expect that Department staff and SBC will continue to work towards resolution of these issues. We also expect that Department staff and SBC will discuss performance standards and benchmarking, other important aspects of the Department's performance analysis.

Moreover, while we are satisfied at the present time that the measures set out in Attachment A would, if properly implemented, suffice for present purposes. performance measurement is a dynamic area and future developments could necessitate changes in our views of appropriate performance measures. For example, while the measures listed in Attachment A are structured to cover the provision of unbundled network elements, once it becomes clear how unbundled network elements will be provided so as to allow requesting carriers to combine such elements in order to provide a telecommunications service, we may find that other measures are necessary to assess performance in this situation. In addition, the development of new services or new methods of providing existing services could necessitate additional performance measures. Alternatively, through ongoing regulatory proceedings, our own investigation, or otherwise, we might learn of additional risks, and even occurrences, of discrimination of which we were not previously aware. Accordingly, we would expect SBC to implement additional measures or modifications to existing measures should it become apparent to the Department that they are necessary. On the other hand, developments might reveal that certain measures were no longer necessary and could be eliminated.

Our satisfaction with the performance measures set out in Attachment A must be placed in its proper context. First, it is limited to the Department's application of its competitive standard. Under section 271, the Department is to evaluate applications for Bell entry using "any standard" the Department believes is appropriate, and the FCC is required to give "substantial weight" to that evaluation. As we have explained, our standard, in addition to the specific statutory prerequisites, requires a demonstration that local markets in a state have been "fully and irreversibly opened to competition," and appropriate performance measures, standards, and benchmarks are important to the Department's application of our competitive standard.

Second, our conclusions relate only to the Department's evaluation of section 271 applications and should not be construed as an expression of the Department's views concerning the appropriate resolution of any federal or state regulatory proceeding relating to performance measures. The FCC and some state commissions have ongoing proceedings considering both performance measures and performance standards, including company-specific and state-specific issues. These proceedings may produce performance measures different from, or in addition to, those described in Attachment A.

I am hopeful that we can resolve the remaining issues expeditiously through our ongoing discussions. I appreciate your cooperation in addressing these issues and look

forward to our continuing mutual efforts. If you have any questions or suggestions regarding these issues, please call.

Sincerely,

Donald J. Russell

Chief

Telecommunications Task Force

PERFORMANCE MEASURES

I. PRE-ORDERING

- 1. Pre-order OSS Availability: Measures both the hours and days the BOC's pre-order OSSs are available to CLECs and non-scheduled downtime.
- 2. Pre-order System Response Times: Measures, in seconds, the speed with which the CLEC Service Representatives receive information (including rejection and error messages) for processes described below with a customer on the line. These cycle-time measures assume the CLEC has mechanical access to the BOC databases and should be measured in a manner that allows appropriate comparisons to like cycle times experienced by BOC retail service representatives. Times are provided separately for the following functions:
 - a. Address verification
 - b. Request for telephone number
 - c. Request for customer service record (CSR)
 - d. Service and product availability
 - e. Appointment scheduling

II. ORDERING

- 1. Firm Order Commitment (FOC) Cycle Time: Measures the average time from CLEC service order submission to BOC response, confirming receipt of a properly formatted and appointed order and committing to complete the order by a specified date. In addition, may be presented as the percentage returned within an agreed upon interval.
- 2 Rejected Order Cycle Time: Measures the average time, from CLEC service order submission to BOC response, for rejecting an incomplete service order or one containing errors. Each submission of an order, up to and including the FOC, requires a response cycle-time result.
- Ordering Quality: The following performance measures are important determinants of service order processing parity or adequacy. Each is important in its own right and provides insights into different aspects of order quality. While the entire set would not be required, Percent Flow Through and either Percent Rejected Orders or Order Submissions per Order are necessary.
 - a. Percent Rejected Orders Measured at the BOC gateway, it is the result of dividing rejected orders by total orders submitted, manually or mechanically. It is an adequacy measure because there are no equivalent BOC analogs BOC orders are "rejected" via automatic edits before the order leaves the service representative position.
 - b. Order Submissions per Order: Measured at the BOC gateway, it is determined by dividing total order submissions by the number of orders receiving a firm order commitment.

- c. Percent Flow Through: Measures the percentage of orders that flow from the BOC gateway to acceptance by the BOC service order processor without manual intervention. Orders rejected at the gateway are excluded.
- 4. Ordering OSS Availability: Measures both the hours and days the BOC's ordering OSSs are available to CLECs and non-scheduled downtime.
- 5. Ordering Center Availability: Reports both the hours and days of operation of the BOC ordering center.
- 6. Speed of Answer-Ordering Center: Measures the average time to reach a BOC service representative.

III. PROVISIONING

- A. Service Provisioning Interval: Measures the time from customer request for service to completion when the appointment is offered by the BOC, either from a common appointment database, generally used in a resale environment, or by agreed-to appointment intervals, more commonly used in a UNE environment. Service Provisioning Interval should be measured both as a mean, or average interval, and as a percent over a standard interval. Next available appointments offered from the work schedule OSS and expedited requests should be included for measurement; customer-requested due dates longer than the offered appointment should be excluded.
 - 1. Average Service Provisioning Interval: Measured in days from end-user request to order completion and counted separately for dispatched and non-dispatched orders.
 - 2. Percent Service Provisioned Out of Interval: Measures the percentage of service orders completed in more than an agreed upon number of days. Ideally, measured incrementally by day. For example, orders completed in more than 3 days, 4 days, 5 days, and 6 days. This performance measure depicts the tail of the interval curve. Combined with the Average Installation Interval, portrays a robust picture of provisioning cycle time.

B Other Provisioning Measures

- 1. Percent Interconnection Facilities Provisioned Out of Interval: Measures the percentage of interconnection facilities (switched trunks and dedicated circuits) provisioned in more than an agreed upon number of days.
- 2. Percent Missed Appointments-Company Reasons: Order completion is measured against the original CLEC-requested due date. No due date changes may be made unless explicitly specified by the end user or explicitly agreed to by the CLEC and the BOC. Orders missed for company reasons-load, facilities, or other-are included. Orders missed due to customer reasons are not counted as a miss for purposes of this measure.
- Percent New Service Failures: Measures the number of trouble reports on newly provisioned service within an agreed number of days of the original trouble. Studies have shown high correlation between provisioning errors and trouble reports occurring within 10 days and lower correlations beyond 10 days.

- 4. Completed Service Order Accuracy: Measures the extent to which orders are completed by the BOC as ordered by the CLEC.
- 5. Orders Held for Facilities: Measures service orders not completed by the original due date because of a lack of network facilities (including loops and central office equipment) in terms of (a) the average time between the original due date and the final completion date, and (b) the number of pending orders, as of the report date, held beyond a specified period (usually 30 days) following the original due date.
- 6. Average Completion Notice Interval: Measures the average time from order completion to notification of the CLEC for orders submitted on a mechanized basis.

IV. MAINTENANCE

A. Trouble Reporting & Clearance

- 1. Trouble Report Rate: Measured as the number of trouble reports per customer or access line per month.
- 2. Percent Repeat Reports: Measured as the percentage of end-user troubles on the same access line within an agreed number of days of the original trouble. Studies have shown high correlation between repair errors and repeat reports occurring within 10 days and lower correlations beyond 10 days.
- 3. Percent Out of Service Over 24 Hours: Measured as a percentage of out-of-service troubles cleared within 24 hours.
- 4. Percent Missed Appointments: Measures the percentage of trouble reports cleared after the promised appointment. Requires that appointment times, once set, cannot be changed except by the end user.
- 5. Mean Time to Repair: Measured as the average interval from trouble report to clearance.
- 6. Interconnection Facilities Restored Out of Interval: Measures the percentage of interconnection facilities (switched trunks and dedicated circuits) reported out of service and restored after an agreed-to interval. May also be measured and reported as an average interval
- 7. Maintenance OSS Availability Measures both the hours and days the BOC's maintenance OSSs are available to CLECs and non-scheduled downtime.
- 8 Maintenance Center Speed of Answer: Measures the average time to reach a BOC repair service representative.

B. Network Quality

- 1 Percent Blocked Calls: Measures trunking grade (quality) of service. Should be provided separately for the following types of trunks:
 - a ILEC End Office to CLEC End Office Trunk Groups
 - b ILEC Tandem to CLEC End Office Trunk Groups
 - c. ILEC Tandem to and from ILEC End Office Trunk Groups

V. BILLING

- 1. Bill Timeliness: Measures the percentage of billing records delivered within an agreed-to interval. Should be provided for the following billing information provided to CLECs:
 - a. Daily Usage File (DUF): Measures, from message creation to the availability of the usage information to the CLEC, the percentage of DUF's provided within the interval.
 - b. Wholesale Bill: Measures the percentage of wholesale bills issued within an agreed-to number of days following the end of the billing cycle.
- 2. Bill Completeness: Measures the percentage of complete billing records for usage charges, recurring charges, and non-recurring charges provided to CLECs. Should be measured after bills are released. Under approved conditions, sufficiently robust pre-release test and audit procedures could substitute for a post-release audit.
 - a. Usage: Measures unbillable usage and usage from the current bill cycle not included on the current wholesale bill.
 - b. Recurring Charges: Measures current bill cycle recurring charges not included on the current wholesale bill.
 - c. Non-Recurring Charges: Measures non-recurring charges completed in the current bill period not included on the current wholesale bill.
- 3. Bill Accuracy: Measures the percentage of accurate billing records for usage charges, recurring charges, and non-recurring charges provided to CLECs. Should be measured after bills are released. Under approved conditions, sufficiently robust pre-release test and audit procedures could substitute for a post-release audit

VI OTHER

- 1. Operator Services Toll Speed of Answer: Measures raw interval in seconds or as a percentage under a set objective. Should be provided separately for unbranded and branded service
- 2. Directory Assistance Speed of Answer: Measures raw interval in seconds or as a percentage under a set objective. Should be provided separately for unbranded and branded service.
- 3 911 Database Update Timeliness and Accuracy: Measures the percentage of missed due dates of 911 database updates and the percentage of accurate updates.

I. RESALE POTS, RESALE SPECIALS AND UNES

A. Pre-Ordering/Ordering

- 1. Measurement Average Response Time For OSS Pre-Order Interfaces.

 Definition The average response time in seconds from the SWBT side of the Remote Access Facility (RAF) and return for pre-order interfaces (Verigate and DataGate) by function:
 - Address Verification
 - Request For Telephone Number
 - Request For Customer Service Record (CSR)
 - Service Availability
 - Service Appointment Scheduling (Due Date)
 - Dispatch Required. FAX AVAIL.

Calculation - $\Sigma[(Query Response Date \& Time) - (Query Submission Date \& Time)]/(Number of Queries Submitted in Reporting Period).$

Report Structure - Reported on a company basis by interface for DATAGATE and VERIGATE.

2. Measurement - EASE Average Response Time.

Definition - Average screen to screen response from the SWBT side of the Remote Access Facility (RAF) and return.

Calculation - Σ [(Query Response Date & Time) - (Query Submission Date & Time)]-(Number of Queries Submitted in Reporting Period).

Report Structure - Reported for all CLECs and SWBT by division name(CPU platform).

3. **Measurement** - OSS Interface Availability.

Definition - Percent of time OSS interface is available compared to scheduled availability.

Calculation - ((= scheduled system available hours - unscheduled unavailable system hours) = scheduled system available hours)) * 100.

Report Structure - Reported on a company basis by interface e.g. EASE, DATAGATE, VERIGATE, LEX, EDI and TOOLBAR. The RAF will be reported by CLEC.

4. **Measurement** - % Firm Order Confirmations (FOCs) Received Within "X" Hours.

Definition - Percent of FOCs returned within a specified time frame from receipt of service requests to return of confirmation to CLEC.

- All Res. And Bus. < 24 Hours
- Complex Business Negotiated
- UNE Loop (1-49 Loops) < 24 Hours
- UNE Loop (> 50 Loops) < 48 Hours
- Switch Ports < 24 Hours.

Calculation - (# FOCs returned within "x" hours ÷ total FOCs sent) * 100.

Report Structure - Reported for CLEC and all CLECs. This includes mechanized from EDI and LEX and manual (FAX or phone orders). The FOC for EASE is considered to be at the time the due date is negotiated and is not included in the calculation.

5. **Measurement** - Average Time To Return FOC.

Definition - The average time to return FOC from receipt of service order to return of confirmation to CLEC.

Calculation - Σ [(Date and Time of FOC) - (Date and Time of Order Acknowledgment)]/(= of FOCs).

Report Structure - Reported for CLEC and all CLECs.

6. Measurement - Percent Mechanized Completions Returned Within 1 Hour Upon The Successful Execution Of The SORD (BU340) Batch Cycle Which Updates The Order Status. Indicating A Completion Notice. The batch process executes at the following times: 9:00 am, 12:00 noon, 3:00 pm, 6:00 pm, 10:30 pm.

Definition - % mechanized completions returned within 1 hour for EDI and LEX.

Calculation - (\neq mechanized completions returned to CLEC within 1 hour \neq total completions) * 100.

Report Structure - Reported for CLEC and all CLECs for the electronic interfaces (EDI and LEX). The 1 hour interval above is subject to change as the EDI polling time frame changes.

- 7. Measurement Average Time to Return Mechanized Completions.
 Definition Average time required to return a mechanized completion.
 Calculation Σ[(Date and Time of Notice Of Completion Issued to the CLEC) (Date and Time of Work Completion)]/(# of Orders Completed).
 Report Structure Reported on CLEC and all CLECs for the electronic interfaces (EDI and LEX). The standard interval for returning completion will be >97% received within 1 hour of order completion. The 1 hour interval is subject to change as the EDI polling time frame changes.
- Measurement Percent Rejects.
 Definition The number of rejects compared to the issued orders for the electronic interfaces (EDI, RMI and LEX).
 Calculation (# of rejects + total orders issued) * 100.
 Report Structure Reported on CLEC and all CLECs for the electronic interfaces (EDI and LEX).
- 9. Measurement Percent Mechanized Rejects Returned Within 1 Hour Of The Start Of The EDI/LASR Batch Process.

 Definition Percent mechanized rejects returned within 1 hour of the start of the EDI/LASR batch process. The EDI and LASR processes execute every two hours between 6:00 A.M. and 12:00 A.M.

 Calculation (# mechanized rejects returned within 1 hour ÷ total rejects) * 100.

 Report Structure Reported for CLEC and all CLECs for the electronic interfaces (EDI and LEX). The standard interval to send a reject will be 97%
- Measurement Mean Time to Return Mechanized Rejects.
 Definition Average time required to return a mechanized reject.
 Calculation Σ[(Date and Time of Order Rejection) (Date and Time of Order Acknowledgment)] (= of Orders Rejected).
 Report Structure Reported on CLEC and all CLECs for the electronic interfaces (EDI and LEX).

within I hour of PON.

11. Measurement - Mechanized Provisioning Accuracy.

Definition - Percent of mechanized orders completed as ordered.

Calculation - (# of orders completed as ordered ÷ total orders) * 100.

Report Structure - Reported by individual CLEC, CLECs and SWBT.

12. Measurement - Order Process Percent Flow Through.

Definition - Percent of orders or LSRs from entry to distribution that progress through SWBT ordering systems excluding rejects.

Calculation - (# of "good" orders that flow through \div total orders) * 100 LASR orders that flow through are those orders that go to the mechanized order generation (MOG). Total orders are the sum or orders that go to the MOG and those that go to folders for manual handling. EASE orders that flow through are those orders that are issued by using the PF11 key and do not go to the error queue. The total orders are all PF11 issued orders.

Report Structure - Reported by individual CLEC, CLECs and SWBT for CLEC typed orders and LSC typed orders.

B. Billing

13. Measurement - Billing Accuracy.

Definition - SWBT performs three bill audits to ensure the accuracy of the bills rendered to its customers: CRIS, CABS and toll/usage. In addition, SWBT has developed a test order process to ensure the accuracy of the CRIS non-recurring charges (see Attachment 1).

Calculation - (# of bills not corrected prior to bill release ÷ total bills audited) * 100.

Report Structure - Reported for aggregate of all CLECs and SWBT for the CRIS, CABS and Usage bill audits.

14. **Measurement** - Percent of Accurate And Complete Formatted Mechanized Bills.

Definition - Measures the ⁰ o of accurate and **complete formatted mechanized** bills via EDI.

Calculation - (Count of accurate and complete formatted mechanized bills via EDI - total # of mechanized bills via EDI.) * 100.

Report Structure - Reported for CLEC and all CLECs.

15. Measurement - Percent Of Billing Records Transmitted Correctly.

Definition - Measures % of billing records transmitted correctly on the usage extract feed.

Calculation - (Count of billing records transmitted correctly + total billing records transmitted) * 100.

Report Structure - Reported for CLEC and all CLECs.

16. Measurement - Billing Completeness.

Definition - Percent of service orders on the bill for the current bill period for both CRIS and CABS.

Calculation - (Count of service orders included in current applicable bill period + total service orders in current applicable bill period) * 100.

Report Structure - Reported for CLEC, all CLECs and SWBT.

17. Measurement - Billing Timeliness (Wholesale Bill).

Definition - The measurement will be % mechanized bills sent by midnight of the 6th work day after the end of the bill period. Since paper bills are handled via the same process that SWBT uses for paper distribution no measurement is provided.

Calculation - (Count of bills released on time ÷ total number of bills released) * 100.

Report Structure - Reported for CLEC and all CLECs.

18. Measurement - Daily Usage Feed Timeliness.

Definition - The percent of usage data transmitted on time. (This measurement is still under development and therefore the definition may change).

Calculation - (Number of usage feeds transmitted on time ÷ total number of usage feeds) * 100.

Report Structure - Reported for CLEC and all CLECs.

19. Measurement - Unbillable Usage.

Definition - The percent usage data that is **unbillable**. (This measurement is still under development and therefore the **definition may change**).

Calculation - (Total unbillable usage - total usage) * 100.

Report Structure - Reported for the aggregate of SWBT and CLECs.

C. Miscellaneous Administrative

20. Measurement - LSC Average Speed Of Answer.

Definition - The average time a customer is in queue. The time begins when the customer enters the queue and ends when the call is answered by a SWBT representative.

Calculation - Total queue time ÷ total calls.

Report Structure - Reported for all calls to the LSC by operational separation and SWBT retail.

21. Measurement - LOC Average Speed Of Answer.

Definition - The average time a customer is in queue. The time begins when the customer enters the queue and ends when the call is answered by a SWBT representative.

Calculation - Total queue time - total calls.

Report Structure - Reported for all calls to the LOC for all CLECs and SWBT retail.

II. RESALE POTS

A. Provisioning

22. Measurement - Mean Installation Interval.

Definition - Average business days from application date to completion date for N,T,C orders excluding customer caused misses and customer requested due dates greater than 5 business days.

Calculation - $[\Sigma(\text{completion date - application date})]/(\text{Total number of orders completed}).$

Report Structure - Reported for CLEC, all CLECs and SWBT, by Field Work (FW), No Field Work (NFW), Business and Residence.

23. Measurement - Percent Installations Completed Within "X" Business Days (POTS).

Definition - Measure of orders completed within "x" business days, 5 business days for FW and 3 business days for NFW, of receipt of confirmed service order for POTS resale service excluding orders where customer requested a due date greater than "x" business days and excluding orders with only customer caused misses.

Calculation - (Count of N.T.C orders installed within business 5 days + total N,T.C orders) * 100.

Report Structure - Reported for CLEC, all CLECs and SWBT by Field Work (FW), No Field Work (NFW), Business and Residence.

24. Measurement - Percent SWBT Caused Missed Due Dates.

Definition - Percent of N.T.C orders where installation was not completed by the due date, excluding customer caused misses.

Calculation - (Count of N.T.C orders not completed by the due date, excluding customer caused misses + total number of N,T,C orders) * 100.

Report Structure - Reported for CLEC, all CLECs and SWBT by Field Work (FW), No Field Work (NFW), Business and Residence.

25. Measurement - Percent Company Missed Due Dates Due To Lack Of Facilities.

Definition - Percent N.T.C orders with missed committed due dates due to lack of facilities.

Calculation - (Count of N.T.C orders with missed committed due dates due to lack of facilities - total N.T.C orders) * 100.

Report Structure - Reported for CLEC, all CLECs and SWBT Retail for POTS. Reported for ≥ 30 calendar days & ≥ 90 calendar days. (Calculated monthly based on posted orders.)

26. **Measurement** - Delay Days For Missed Due Dates Due To Lack Of Facilities.

Definition - Average calendar days from due date to completion date on company missed orders due to lack of facilities.

Calculation - Σ (Completion date - committed order due date)/(# of posted orders).

Report Structure - Reported for CLEC, all CLECs and SWBT Retail POTS.

27. Measurement - Percent Installation Reports Within 10 Days (I-10).

Definition - Percent of N,T,C orders that receive a network customer trouble report not caused by CPE or wiring within 10 calendar days of service order completion excluding subsequent reports and all disposition code "13" reports (excludable reports).

Calculation - (Count of N.T.C orders that receive a network customer trouble report within 10 calendar days of service order completion ÷ total N,T,C orders (excludes trouble reports received on the due date)) * 100.

Report Structure - Reported for POTS Resale by CLEC, total CLECs and SWBT retail by Field Work (FW), No Field Work (NFW) business and residence.

B. Maintenance

28. Measurement - Trouble Report Rate.

Definition - The number of customer trouble reports not caused by CPE or wiring.—CPE and disposition code "13" reports within a calendar month per 100 lines.

Calculation - [Total number of customer trouble reports ÷ (total lines ÷100)]. Report Structure - Reported for POTS Resale trouble reports by CLEC, all CLECs and SWBT retail. This measurement is only valid for line counts of 300,000 or greater.